IN THE CLAIMS

Please amend the claims as follows:

Claims 1-26 (Cancelled)

27. (Currently Amended) A nanoscale particle array, comprising:

a substrate having a plurality of nanopores in a surface thereof; and

one or more metals or non-metals deposited in said plurality of nanopores to a depth of at least 5 nm and with coercivity of at least 500 Oe;

and having an in-plane squareness of from 0 to 0.6 and a perpendicular coercivity of up to 2 kOe,

wherein the array has a distribution of nanoparticles made of said one or more metals or non-metals deposited in said nanopores, wherein the nanoparticles have an average length, L, and a standard deviation, σ, such that σ/L is no more than 5%.

28. (Original) The nanoscale particle array of claim 27, wherein said one or more metals are selected from the group consisting of magnetic metals, non-magnetic metals, semiconductors and metal oxides.

29. (Original) The nanoscale particle array of claim 28, wherein said one or more metals are selected from the group consisting of magnetic metals and alloys thereof.

30. (Original) The nanoscale particle array of claim 29, wherein said magnetic metals are selected from the group consisting of Fe, Co, Ni and alloys thereof.

31. (Original) The nanoscale particle array of claim 27, wherein said substrate is aluminum.

32. (Original) The nanoscale particle array of claim 27, wherein said plurality of nanopores are present in said substrate at a density of from 10^6 to 10^{12} cm^{-2}.

33. (Currently Amended) A magnetic information storage medium, comprising:

a substrate having a plurality of nanopores in a surface thereof; and

one or more metals deposited in said plurality of nanopores to a depth of at least 5 nm and with coercivity of at least 500 Oe, wherein the magnetic information storage medium has a recording density of at least 40 Gb/in^2, an in-plane squareness of from 0 to 0.6 and a perpendicular coercivity of up to 2 kOe,

wherein the plurality of nanopores has a distribution of nanoparticles made of said one or more metals or non-metals deposited in said nanopores, wherein the nanoparticles have an average length, L, and a standard deviation, σ, such that σ/L is no more than 5%.

34. (Original) The magnetic information storage medium of claim 33, wherein said one or more metals are selected from the group consisting of magnetic metals, metal oxides and magnetic metal alloys.

35. (Original) The magnetic information storage medium of claim 34, wherein said one or more metals are selected from the group consisting of magnetic metals and alloys thereof.

36. (Original) The magnetic information storage medium of claim 35, wherein said magnetic metals are selected from the group consisting of Fe, Co, Ni and alloys thereof.

37. (Original) The magnetic information storage medium of claim 33, wherein said substrate is aluminum.

38. (Original) The magnetic information storage medium of claim 33, wherein said plurality of nanopores are present in said substrate at a density of from 10^6 to 10^{12} cm^{-2}.

39. (Currently Amended) A magnetic information storage medium, comprising:

a substrate; and

means for providing a recording density of at least 40 Gb/in^2 on a surface of said substrate, wherein said magnetic information storage medium has an in-plane squareness of from 0 to 0.6 and a perpendicular coercivity of up to 2 kOe,

wherein the medium has a distribution of nanoparticles made of one or more metals or non-metals deposited in a plurality of nanopores in said substrate, wherein the nanoparticles have an average length, L, and a standard deviation, σ, such that σ/L is no more than 5%.